# USER MANUAL



Model No. PM63 (shown) PM63E



# SAVE THESE INSTRUCTIONS

**ACAUTION** 

Federal (USA) law restricts this device to sale by or on the order of a physician.

PRECISION MEDICAL.

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#### RECEIVING/INSPECTION

Remove the Precision Medical Power Vac + Aspirator from the packaging and inspect for damage. If there is any damage, DO NOT USE and contact your Equipment Provider.

#### INTENDED USE

To supply a continuous or intermittent vacuum source adequate within the stated operating vacuum range, to aspirate fluids in medical suctioning procedures by trained healthcare professionals.

# **READ ALL INSTRUCTIONS BEFORE USING**

This manual instructs a Professional to operate the Power Vac + Aspirator. This is provided for your safety and to prevent damage to the Aspirator. If you do not understand this manual, DO NOT USE the Aspirator and contact your Equipment Provider.

#### EXPLANATION OF ABBREVIATION

mmHg Millimeters of Mercury

#### SAFETY INFORMATION - WARNINGS AND CAUTIONS

**A** DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

**AWARNING** 

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

**A**CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION

Used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.



CONSULT ACCOMPANYING DOCUMENTS



Type B Equipment



Protective Earth Ground



**Fuse** 



**Alternating Current** 

# **A** DANGER

- TO REDUCE THE RISK OF ELECTROCUTION:
- Always unplug Power Vac + Aspirator immediately after using.
- **DO NOT** use while bathing.
- DO NOT place or store Aspirator where it can fall or be pulled into a tub or sink.
- DO NOT place or drop into water or other liquid.
- DO NOT reach for the Aspirator that has fallen into water.
   Unplug immediately.
- DO NOT attempt to repair Aspirator. Any attempt could result in electrical shock.
- Never use near any type of flame or flammable/explosive substances.
- Caution must be exercised when using this Aspirator where oxygen is being administered.

#### **AWARNING**

# TO REDUCE RISK OF BURNS, ELECTROCUTION, FIRE, OR INJURY TO PERSONS:

- The Power Vac + Aspirator should never be left unattended when running.
- Close supervision is necessary when the Aspirator is used by, on, or near children or invalids.
- Use the Aspirator only for its "Intended Use" as described in this manual.
- · Adjust to desired setting prior to use.
- DO NOT use attachments not recommended by Precision Medical. Inc.
- DO NOT use if Aspirator has a damaged cord or plug.
- DO NOT use if Aspirator has been dropped or damaged.
- **DO NOT** cover air vents. Restriction of air flow will cause unit to overheat, causing the thermal reset to shut down the Aspirator.
- DO NOT drop or insert any object into any opening or hole.
- Connect this Aspirator to a properly grounded outlet only. See Grounding Instructions.
- Keep the cord away from heated surfaces.

POWER/VAC+

#### **SPECIFICATIONS**

**Operating Vacuum Range:** 0 - 200 mmHg with "Full Vacuum"

Full Vacuum is 279 mmHg ± 51 mmHg

Vacuum Modes: REG - Regulated (provides an adjustable,

continuous vacuum level)

OFF - No Vacuum

INT - Intermittent (provides an adjustable,

intermittent vacuum level)

Factory set at approximately sixteen (16) **Intermittent Cycle Time:** 

seconds "ON", eight (8) seconds "OFF"

 $0 - 100 \text{ mmHg} \pm 4 \text{ mmHg}$ Gauge Accuracy:

101 - 200 mmHg ±6 mmHg

**Dimensions:** Length: 15.88 in (40.32 cm)

> Width: 7.38 in (18.73 cm) (25.72 cm)

10.13 in Height:

Weight: 21.70 lbs (9.85 kg)**Shipping Weight:** 26.08 lbs (11.83 kg)

**Electrical:** PM63: 108-132 VAC, 60 Hz, 5 Amps

> PM63E: 207-253 VAC, 50 Hz, 2.2 Amps

**Operating Temperature Range:** 

41°F to 95°F (5°C to 35°C)

**Transport / Storage Requirements:** 

Temperature Range: -4°F to 104°F (-20°C to 40°C)

> Humidity: Max 95% Noncondensing

Filter: Inline, Hydrophobic

**Safety Systems:** High Temperature Motor Shutdown, Class B.

Thermal Limit Automatic Reset

**Suction Canister:** Maximum Volume 2000 cc

Do not exceed vacuum level of 25 inHg (640 mmHg)

**Equipment Classification:** 

- with respect to protection from electrical shock. Class I Type B - degree of protection against electrical shock.

IPX0 - degree of protection against ingress of liquids.

Mode of Operation - continuous

This product meets the EMC requirements of EN550011: 1998.

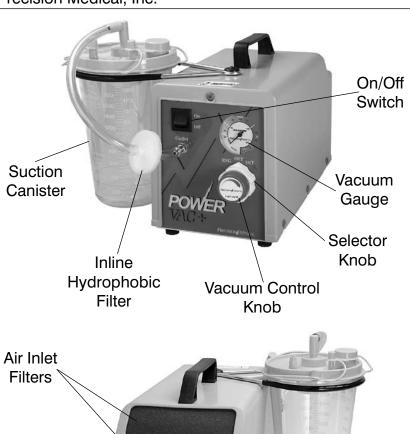
This product is not suitable for use in the presence of a flammable anesthetic mixture with air, oxygen or nitrous oxide.

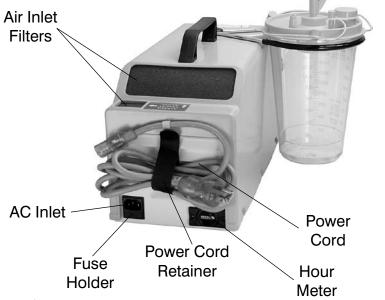
Specifications are subject to change without prior notice.

# **COMPONENT DESCRIPTION**

#### **ACAUTION**

Missing or illegible labels must be replaced, contact Precision Medical, Inc.





POWER/VAC+

#### **GROUNDING INSTRUCTIONS**

The product should be grounded. In the event of an electrical short circuit, grounding reduces the risk of electrical shock by providing an escape wire for the electrical current. This product is equipped with a cord having a grounding wire with a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded.

# **A DANGER**

Improper use of the grounding plug can result in a risk of electrical shock.

#### **AWARNING**

Ground reliability can only be achieved when the power cord is connected to an equivalent receptacle marked "Hospital Grade".

# **OPERATING INSTRUCTIONS**

# **AWARNING**

Read this User Manual before operating the Power Vac + Aspirator.

#### CAUTION

Inspect the Power Vac + Aspirator for visual damage before use, DO NOT USE if damaged.

- Place Aspirator near a properly grounded electrical receptacle on a table, floor or other horizontal, smooth, hard surface.
   Allow a minimum of 4 in (10 cm) clearance on all sides to ensure adequate air flow for cooling of Aspirator.
- 2. Be sure the On/Off Switch and Selector Knob are in the "OFF" position.
- 3. Be sure the Inline Hydrophobic Filter is properly connected to the vacuum port on Suction Canister lid.
  - The Inline Hydrophobic Filter prevents liquid from entering the vacuum pump.

# **CAUTION**

**DO NOT** run the Aspirator without Inline Hydrophobic Filter and canister. This will void the warranty.

- 4. Plug the Aspirator into a properly grounded receptacle.
- 5. Turn the On/Off Switch to the "ON" position.
- 6. Turn the Selector Knob to the "REG" position.

- 7. Block the patient connection on the Suction Canister and adjust the Vacuum Control Knob to the desired vacuum.
  - To INCREASE vacuum Turn knob CLOCKWISE

To DECREASE vacuum - Turn knob COUNTERCLOCKWISE

 Vacuum should be set as prescribed by your physician or healthcare professional.

**NOTE:** Intermittent cycle starts in the OFF phase, therefore a delay occurs before the ON (suction) cycle begins.

- 8. Turn Selector Knob to the "INT" position to obtain an intermittent, adjustable vacuum that cycles on and off.
- 9. Connect one end of Patient Suction Tubing to Patient Tubing Connection on the Suction Canister.
- Connect other end of Patient Suction Tubing to suction catheter and begin procedure as instructed by healthcare provider.
- 11. When procedure is completed, press the On/Off Switch to the "OFF" position.
  - · DO NOT overfill the canister.
- 12. Empty the Suction Canister as follows:
  - Remove the canister from its bracket and empty as instructed by your Physician or Healthcare Professional.

#### CAUTION

Canister is for single patient use only.

13. Replace Suction Canister and reconnect all suctioning tubing.

# **CLEANING/MAINTENANCE**

#### **AWARNING**

- Turn the Power Vac + Aspirator off and disconnect from any external power source before cleaning.
- **DO NOT** attempt to repair. There are no serviceable parts inside.

The Inline Hydrophobic Filter cannot be cleaned. If it becomes contaminated or clogged, it must be replaced.

# To replace Inline Hydrophobic Filter:

- 1. Disconnect filter assembly from Suction Canister and remove Suction Canister from the Aspirator.
- 2. Remove filter assembly from the Aspirator.
- 3. Dispose of filter only.
- 4. Install new Inline Hydrophobic Filter (Part #1690) and reconnect tubing and elbow.

Tubing is single patient use only. DO NOT clean.

# To replace Air Filters:

#### CAUTION

- Excessive dust build-up on air filters will reduce performance of Aspirator. If this occurs, filters should be cleaned or replaced.
- DO NOT use where saline mist could be drawn into the Aspirator. The Air Filters do not filter out saline.
   Saline causes rapid deterioration of the Aspirator and will void the warranty.
- 1. Check both Air Filters on top rear of cabinet for dust build-up.
- 2. If dust build-up occurs, unplug Aspirator, remove Air Filters from their recessed areas and wash in warm, soapy water and rinse.
- 3. Absorb excess water from filters with a dry towel.
- 4. Return filters to their original locations.

# **Cleaning for Exterior Components:**

Use a cloth or sponge dampened with soap and water. Wipe dry with a clean cloth or paper towel.

#### **AWARNING**

- **DO NOT** immerse the Power Vac + Aspirator in liquid.
- If Aspirator is used for treatment of infectious disease, consult your Physician or Healthcare Professional for recommended cleaning procedures.

# **RETURNS**

Returned products require a Returned Goods Authorization (RGA) number, contact Precision Medical, Inc. All returns must be packaged in sealed containers to prevent damage. Precision Medical, Inc. will not be responsible for goods damaged in transit. Refer to Precision Medical, Inc. Return Policy available on the Internet, www.precisionmedical.com.

**NOTE:** When returning this Power Vac + Aspirator, disconnect the power cord from the back of unit.

# **DISPOSAL INSTRUCTIONS**

Dispose of Bio-waste products as described by your Healthcare Professional or Healthcare Facility Protocol.

**Please Recycle** 



# REPLACEMENT PARTS

Part #	Description
1690	Inline Hydrophobic Filter
1955	Suction Tubing, 1/4 ID x 6 ft, Clear Non-Conductive PVC
502391	Small Air Filter
502471	Large Air Filter
502687	Suction Canister - 2000 cc (with lid)
502690	Inline Hydrophobic Filter & Tube Assy

# **TROUBLESHOOTING**

If the Power Vac + Aspirator fails to function, consult the Troubleshooting Guide. If problem cannot be solved, consult your Equipment Provider.

# TROUBLESHOOTING GUIDE

Problem	Probable Cause	Remedy
Aspirator will not operate	On/Off switch in     "OFF" position     Power Cord not     connected properly     Thermal limit     exceeded	<ol> <li>Push On/Off switch to "ON" position</li> <li>Check plug at outlet.</li> <li>Shut Aspirator "OFF", wait 15 minutes, be sure yents are clear</li> </ol>
	4. Blown Fuse	4. Replace Fuse
No vacuum on gauge / no vacuum at Patient	Hydrophobic Filter     assembly not     connected properly	Confirm and tighten connections
Connection Tubing	Suction Canister     not connected or     assembled properly	Confirm and tighten connections/assembly
	Defective Suction     Canister	Replace Suction     Canister
	4. Defective regulator	Contact your Equipment     Provider
No Vacuum on gauge/vacuum at Patient Tubing Connection	Defective vacuum gauge	Contact your Equipment     Provider
Vacuum on gauge / No vacuum at	Clogged Hydrophobic Filter	Replace Hydrophobic     Filter
Patient Tubing	2. Canister overfilled	2. Empty canister
Unable to adjust vacuum	Defective regulator	Contact your Equipment     Provider

# LIMITED WARRANTY AND LIMITATION OF LIABILITY

Precision Medical, Inc. warrants that Power Vac + Aspirator (the Product) will be free of defects in workmanship and/or material for the following period:

Three (3) years from shipment

Should any failure to conform to this warranty appear within the applicable period, Precision Medical, Inc. shall, upon written notification thereof and substantiation that the goods have been stored, installed, maintained and operated in accordance with Precision Medical, Inc.'s instructions and standard industry practice, and that no modifications, substitutions, or alterations have been made to the goods, correct such defect by suitable repair or replacement at its own expense.

#### ORAL STATEMENTS DO NOT CONSTITUTE WARRANTIES.

The representatives of Precision Medical, Inc. or any retailers are not authorized to make oral warranties about the merchandise described in this contract, and any such statements shall not be relied upon and are not part of the contract for sale. Thus, this writing is a final, complete and exclusive statement of the terms of that contract.

THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHER WARRANTY OF QUALITY, WHETHER EXPRESS OR IMPLIED.

Precision Medical, Inc. shall not under any circumstances be liable for special, incidental or consequential damages including but not limited to lost profits, lost sales, or injury to person or property. Correction of nonconformities as provided above shall constitute fulfillment of all liabilities of Precision Medical, Inc. whether based on contract, negligence, strict tort or otherwise. Precision Medical, Inc. reserves the right to discontinue manufacture of any product or change product materials, designs, or specifications without notice.

Precision Medical, Inc. reserves the right to correct clerical or typographical errors without penalty.



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